Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-20. (Canceled)

21. (Currently Amended) An exhaust processor comprising:

a first soot filter,

a second soot filter,

a burner operable to heat fluid for regeneration of the first soot filter and the second soot filter,

a first temperature sensor operable to sense a first outlet temperature of the first soot filter,

an exhaust gas flow control assembly operable to control a flow of exhaust gas between the first soot filter and the second soot filter, ~~and~~

a heated fluid flow control assembly operable to control a flow of fluid heated by the burner between the first soot filter and the second soot filter, and

a combustible fluid flow control assembly,

wherein during regeneration of the first soot filter (i) the exhaust gas flow control assembly blocks the flow of exhaust gas to the first soot filter and allows the flow of exhaust gas to the second soot filter, ~~and~~ (ii) the heated fluid flow control assembly allows the flow of fluid heated by the burner to the first soot filter and blocks the flow of fluid heated by the burner to the second soot filter, and (iii) the combustible fluid flow control assembly controls a flow of combustible fluid to the burner in response to the first outlet temperature sensed by the first temperature sensor.

22. (Previously Presented) The exhaust processor of claim 21, wherein the exhaust gas flow control assembly comprises:

a first exhaust gas valve associated with the first soot filter, the first exhaust gas valve being movable between an opened position to allow flow of exhaust gas to the first soot filter and a closed position to block flow of exhaust gas to the first soot filter, and

a second exhaust gas valve associated with the second soot filter, the second exhaust valve being movable between an opened position to allow flow of exhaust gas to the second soot filter and a closed position to block flow of exhaust gas to the second soot filter.

23. (Previously Presented) The exhaust processor of claim 22, comprising a controller to control movement of the first exhaust gas valve and the second exhaust gas valve between their respective opened and closed positions.

24. (Previously Presented) The exhaust processor of claim 22, wherein the heated fluid flow control assembly comprises:

a first heated fluid valve associated with the first soot filter, the first heated fluid valve being movable between an opened position to allow flow of fluid heated by the burner to the first soot filter and a closed position to block flow of fluid heated by the burner to the first soot filter, and

a second heated fluid valve associated with the second soot filter, the second heated fluid valve being movable between an opened position to allow flow of fluid heated by the valve to the second soot filter and a closed position to block flow of fluid heated by the burner to the second soot filter.

25. (Previously Presented) The exhaust processor of claim 24, comprising a controller to control movement of the first heated fluid valve and the second heated fluid valve between their respective opened and closed positions.

26. (Previously Presented) The exhaust processor of claim 24, comprising:

a first chamber that is positioned upstream from the first soot filter and comprises (i) a first exhaust gas inlet to pass exhaust gas into the first chamber for passage to the first soot filter when the first exhaust gas valve is positioned in its opened position and (ii) a first heated fluid inlet that is positioned downstream from the first exhaust gas inlet to pass fluid heated by the burner into the first chamber for passage to the first soot filter when the first heated fluid valve is positioned in its opened position, and

a second chamber that is positioned upstream from the second soot filter and comprises (i) a second exhaust gas inlet to pass exhaust gas into the second chamber for passage to the second soot filter when the second exhaust gas valve is positioned in its opened position and (ii) a second heated fluid inlet that is positioned downstream from the second exhaust gas inlet to pass fluid heated by the burner into the second chamber for passage to the second soot filter when the second heated fluid valve is positioned in its opened position.

27. (Previously Presented) The exhaust processor of claim 21, comprising a third soot filter and a fourth soot filter, wherein:

the burner is operable to heat fluid for regeneration of the third soot filter and the fourth soot filter,

the exhaust gas flow control assembly is operable to control the flow of exhaust gas between the first soot filter, the second soot filter, the third soot filter, and the fourth soot filter,

the heated fluid flow control assembly is operable to control the flow of fluid heated by the burner between the first soot filter, the second soot filter, the third soot filter, and the fourth soot filter, and

during regeneration of the first soot filter (i) the exhaust gas flow control assembly allows the flow of exhaust gas to each of the second soot filter, the third soot filter, and the

fourth soot filter, and (ii) the heated fluid flow control assembly blocks the flow of fluid heated by the burner to each of the second soot filter, the third soot filter, and the fourth soot filter.

28. (Previously Presented) The exhaust processor of claim 27, wherein:

the exhaust gas flow control assembly comprises (i) a first exhaust gas valve associated with the first soot filter and movable between an opened position to allow flow of exhaust gas to the first soot filter and a closed position to block flow of exhaust gas to the first soot filter, (ii) a second exhaust gas valve associated with the second soot filter and movable between an opened position to allow flow of exhaust gas to the second soot filter and a closed position to block flow of exhaust gas to the second soot filter, (iii) a third exhaust gas valve associated with the third soot filter and movable between an opened position to allow flow of exhaust gas to the third soot filter and a closed position to block flow of exhaust gas to the third soot filter, and (iv) a fourth exhaust gas valve associated with the fourth soot filter and movable between an opened position to allow flow of exhaust gas to the fourth soot filter and a closed position to block flow of exhaust gas to the fourth soot filter, and

the heated fluid flow control assembly comprises (i) a first heated fluid valve associated with the first soot filter and movable between an opened position to allow flow of fluid heated by the burner to the first soot filter and a closed position to block flow of fluid heated by the burner to the first soot filter, (ii) a second exhaust gas valve associated with the second soot filter and movable between an opened position to allow flow of fluid heated by the burner to the second soot filter and a closed position to block flow of fluid heated by the burner to the second soot filter, (iii) a third exhaust gas valve associated with the third soot filter and movable between an opened position to allow flow of fluid heated by the burner to the third soot filter and a closed position to block flow of fluid heated by the burner to the third soot filter, and (iv) a fourth exhaust gas valve associated with the fourth soot filter and

movable between an opened position to allow flow of fluid heated by the burner to the fourth soot filter and a closed position to block flow of fluid heated by the burner to the fourth soot filter.

29. (Previously Presented) The exhaust processor of claim 28, comprising:

a first chamber that is positioned upstream from the first soot filter and comprises (i) a first exhaust gas inlet to pass exhaust gas into the first chamber for passage to the first soot filter when the first exhaust gas valve is positioned in its opened position and (ii) a first heated fluid inlet that is positioned downstream from the first exhaust gas inlet to pass fluid heated by the burner into the first chamber for passage to the first soot filter when the first heated fluid valve is positioned in its opened position,

a second chamber that is positioned upstream from the second soot filter and comprises (i) a second exhaust gas inlet to pass exhaust gas into the second chamber for passage to the second soot filter when the second exhaust gas valve is positioned in its opened position and (ii) a second heated fluid inlet that is positioned downstream from the second exhaust gas inlet to pass fluid heated by the burner into the second chamber for passage to the second soot filter when the second heated fluid valve is positioned in its opened position

a third chamber that is positioned upstream from the third soot filter and comprises (i) a third exhaust gas inlet to pass exhaust gas into the third chamber for passage to the third soot filter when the third exhaust gas valve is positioned in its opened position and (ii) a third heated fluid inlet that is positioned downstream from the third exhaust gas inlet to pass fluid heated by the burner into the third chamber for passage to the third soot filter when the third heated fluid valve is positioned in its opened position, and

a fourth chamber that is positioned upstream from the fourth soot filter and comprises (i) a fourth exhaust gas inlet to pass exhaust gas into the fourth chamber for passage to the fourth soot filter when the fourth exhaust gas valve is positioned in its opened position and

(ii) a fourth heated fluid inlet that is positioned downstream from the fourth exhaust gas inlet to pass fluid heated by the burner into the fourth chamber for passage to the fourth soot filter when the fourth heated fluid valve is positioned in its opened position.

30. (Canceled)

31. (Currently Amended) A method of operating an exhaust processor, the method comprising the steps of:

operating an exhaust gas flow control assembly so as to block a flow of exhaust gas to a first soot filter and to allow the flow of exhaust gas to a second soot filter during regeneration of the first soot filter and so as to block the flow of exhaust gas to the second soot filter and to allow the flow of exhaust gas to the first soot filter during regeneration of the second soot filter, ~~and~~

operating a heated fluid flow control assembly so as to allow a flow of fluid heated by a burner to the first soot filter and to block the flow of fluid heated by the burner to the second soot filter during regeneration of the first soot filter and so as to allow the flow of fluid heated by the burner to the second soot filter and to block the flow of fluid heated by the burner to the first soot filter during regeneration of the second soot filter, and

controlling flow of combustible fluid to the burner in response to a first outlet temperature of the first soot filter during regeneration of the first soot filter and in response to a second outlet temperature of the second soot filter during regeneration of the second soot filter.

32. (Previously Presented) The method of claim 31, wherein:

the exhaust gas flow control assembly comprises a first exhaust gas valve and a second exhaust gas valve and the step of operating the exhaust gas flow control assembly comprises (i) moving the first exhaust gas valve to a closed position to block the flow of

exhaust gas to the first soot filter and (ii) moving the second exhaust gas valve to an opened position to allow the flow of exhaust gas to the second soot filter, and

the heated fluid flow control assembly comprises a first heated fluid valve and a second heated fluid valve and the step of operating the heated fluid flow control assembly comprises (i) moving the first heated fluid valve to an opened position to allow the flow of fluid heated by the burner to the first soot filter and (ii) moving the second heated fluid valve to a closed position to block the flow of fluid heated by the burner to the second soot filter.

33. (Previously Presented) The method of claim 32, wherein:

the exhaust gas flow control assembly comprises a third exhaust gas valve and a fourth exhaust gas valve and the step of operating the exhaust gas flow control assembly comprises (i) moving the third exhaust gas valve to an opened position to allow the flow of exhaust gas to a third soot filter and (ii) moving the fourth exhaust gas valve to an opened position to allow the flow of exhaust gas to a fourth soot filter, and

the heated fluid flow control assembly comprises a third heated fluid valve and a fourth heated fluid valve and the step of operating the heated fluid flow control assembly comprises (i) moving the third heated fluid valve to a closed position to block the flow of fluid heated by the burner to the third soot filter and (ii) moving the fourth heated fluid valve to a closed position to block the flow of fluid heated by the burner to the fourth soot filter.

34. (Canceled)

35. (Currently Amended) The method of claim 31, ~~further comprising~~ wherein the controlling step comprises controlling flow of air and fuel to the burner ~~in response to an outlet temperature of the first soot filter~~.

36. (Currently Amended) The method of claim 35, wherein the step of controlling ~~step~~ flow of air and fuel comprises controlling operation of an air valve and a fuel valve in response to sensing of the first outlet temperature by ~~an~~ a first outlet temperature sensor positioned adjacent to an outlet end of the first soot filter to maintain the first outlet temperature at a regeneration temperature during regeneration of the first soot filter and in response to sensing of the second outlet temperature by a second outlet temperature sensor positioned adjacent to an outlet end of the second soot filter to maintain the second outlet temperature at a regeneration temperature during regeneration of the second soot filter.

37. (Previously Presented) An exhaust processor comprising:

a soot filter operable to filter exhaust gas,

a temperature sensor operable to sense an outlet temperature of the soot filter,

a flow rate changer operable to change the flow rate of heated fluid flowing to the soot filter,

a temperature changer operable to change the temperature of the heated fluid, and

a controller operable to operate the flow rate changer and the temperature changer to cause a change in at least one of the flow rate and temperature of the heated fluid in response to the outlet temperature sensed by the temperature sensor to maintain the outlet temperature at a regeneration temperature during regeneration of the soot filter.

38. (Previously Presented) The exhaust processor of claim 37, further comprising an air supply, wherein the flow rate changer includes a valve positioned to change the flow rate of a flow of air from the air supply, the temperature changer includes an electric heater positioned to change the temperature of the flow of air from the air supply, and the controller is configured to control operation of the valve and the electric heater in response to the outlet temperature sensed by the temperature sensor.

39. (Previously Presented) The exhaust processor of claim 37, further comprising a burner, an air supply, and a fuel supply, the flow rate changer includes an air valve configured to control a flow of air from the air supply to the burner, the temperature changer includes a fuel valve configured to control a flow of fuel from the fuel supply to the burner, the burner is configured to combust a mixture of air received from the air supply via the air valve and fuel received from the fuel supply via the fuel valve to provide the heated fluid, and the controller is configured to control operation of the air valve and the fuel valve in response to the outlet temperature sensed by the temperature sensor.

40. (Canceled)

41. (New) The exhaust processor of claim 21, comprising a controller to control operation of the combustible fluid flow control assembly in response to the first outlet temperature sensed by the first temperature sensor during regeneration of the first soot filter.

42. (New) The exhaust processor of claim 41, wherein:

the combustible fluid flow control assembly comprises (i) an air valve operable to control flow of air to the burner and (ii) a fuel valve operable to control flow of fuel to the burner, and

the controller is operable to control operation of the air valve and the fuel valve.

43. (New) The exhaust processor of claim 41, comprising a second temperature sensor operable to sense a second outlet temperature of the second soot filter, wherein the controller is operable to control operation of the combustible fluid flow control assembly in response to the second outlet temperature sensed by the second temperature sensor during regeneration of the second soot filter.